

1 The opinion in support of the decision being entered today was *not* written
2 for publication in and is *not* binding precedent of the Board.

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4 UNITED STATES PATENT AND TRADEMARK OFFICE

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7 BEFORE THE BOARD OF PATENT APPEALS
8 AND INTERFERENCES

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11 *Ex parte* JON R. STIEBER, THOMAS P. ADAMS, ROBERT L. ZWIEG, and
12 WILLIAM R. KIRKMAN

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15 Appeal 2006-2607
16 Application 10/004,738
17 Technology Center 3600

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20 Decided: February 27, 2007

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23 Before MURRIEL E. CRAWFORD, STUART S. LEVY and ANTON W.
24 FETTING, *Administrative Patent Judges*.

25 ANTON W. FETTING, *Administrative Patent Judge*.

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28 DECISION ON APPEAL

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31 STATEMENT OF CASE

32 This appeal involves claims 2-9 and 15-21, the only claims pending in this
33 application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

34
35 We AFFIRM-IN-PART.

1 The appellants' invention relates to a cash handling machine networked to
2 peripherals through a wireless communications network (Specification 1). An
3 understanding of the invention can be derived from a reading of exemplary claim
4 15, which is reproduced below.

5 15. A cash management system comprising:

6 a first cash handling device for processing notes including
7 sorting of notes, totaling of notes received, and communicating note
8 totals to at least one of: a second cash handling device, a visual
9 display and communication through a network,

10 wherein said first cash handling device does not [sic, have] the
11 capability to receive or dispense coins;

12 a second cash handling device for processing coins including
13 sorting of coins, totaling of coins received, and communicating coin
14 totals to at least one of: the first cash handling machine, a visual
15 display and a network,

16 wherein said second cash handling device does not have the
17 capability to receive or dispense notes; and

18 wherein said first cash handling device and said second cash
19 handling device have respective circuits for communicating through a
20 first wireless communication network operating according to a
21 network standard for locally distributed wireless networks operating
22 without servers; and

23 wherein the first cash handling device and the second cash
24 handling device provide a cooperative cash management system in
25 which the totals for notes and coins, respectively, are brought together
26 through wireless communication from these respective devices within
27 a range of no more than 100 meters from each other and are displayed
28 on at least one of the first cash handling device, the second cash
29 handling device or a third device operating as a visual display no more
30 than 100 meters from one of the first the first cash handling device
31 and the second cash handling device.

1 This appeal arises from the Examiner's final rejection, mailed April 6, 2005.
2 The Appellants filed an Appeal Brief in support of the appeal on September 29,
3 2005, and the Examiner mailed an Examiner's Answer to the Appeal Brief on
4 December 20, 2005. A Reply Brief was filed on January 17, 2006. A
5 Supplemental Examiner's Answer was mailed on May 8, 2006. A second Reply
6 Brief was filed on June 5, 2006.

7 PRIOR ART

8 The prior art references of record relied upon by the Examiner in rejecting the
9 appealed claims are:

10 Watanabe	US 4,733,765	Mar. 29, 1988
11 Richardson	US 6,028,764	Feb. 22, 2000
12 Amos	US 6,554,184 B1	Apr. 29, 2003
13		(filed May 5, 2000)

14 Amos shows a network of cash machines into which coins and bills may be
15 deposited or withdrawn. Amos' network may include a wireless component.
16 Watanabe shows a cash machine which ensures that bills and coins are not placed
17 in the wrong device and that sorts coins and bills placed therein. Richardson is
18 evidence of the notoriety of several modes of wireless communication and that
19 wireless communication is an art recognized mode of linking two physically
20 separate devices for data transfer.

21 REJECTIONS

22 We first note that the Examiner has referred, only indirectly to the prior Office
23 action without fully restating the point relied on in the Answer, contrary to the
24 requirements of *the Manual of Patent Examining Procedure (MPEP)* § 1207.02.
25 Even more problematic, the Examiner did not even set forth the reasoning behind
26 the rejection in that final Office action, but only set forth two actions prior to that

1 in the Final Rejection mailed April 21, 2004. We advise the Examiner that the
2 technology known as cut and paste that could have put the Answer in compliance
3 with the *MPEP*. “Judges are not like pigs, hunting for truffles buried in briefs.”
4 *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1320, 78 USPQ2d
5 1097, 1103 (Fed. Cir. 2006).

6 The Appellants contend that the Examiner acted improperly in making the
7 most recent rejection final (Br. 7). However, this relates to a petitionable matter
8 and not to an appealable matter. *See In re Schneider*, 481 F.2d 1350, 1356-57, 179
9 USPQ 46, 51 (CCPA 1973) and *In re Mindick*, 371 F.2d 892, 894, 152 USPQ 566,
10 568 (CCPA 1967). *See also the MPEP* § 1002.02(c), item 3(a) and § 1201. Thus,
11 the relief sought by the Appellants would have been properly presented by a
12 petition to the Commissioner under 37 C.F.R. § 1.181 instead of by appeal to this
13 Board. Accordingly, we will not further consider this issue.

14 Claims 2-9 and 15-21 stand rejected under 35 U.S.C. § 112, second paragraph,
15 as rendering the claimed subject matter indefinite.

16 Claims 2-9 and 15-21¹ stand rejected under 35 U.S.C. § 103(a) as obvious over
17 Amos, Watanabe, and Richardson.

¹The Examiner stated that claims 2-9 and 15-29 (Answer 4) are rejected, but there are no claims in the application above claim 21. The Examiner indicated that claim 21 is included in the rejection, and the Appellants argued claim 21. Therefore, we treat this rejection as including claims 15-21.

ISSUES

The issues pertinent to this appeal are

- Whether the phrases “for processing notes including sorting,” “for processing coins including sorting,” and “are brought together,” in claim 15 are indefinite.
- Whether the prior art motivates the combination of the applied art.
- Whether the art applied shows
 - wireless communication between two cash machines
 - local network with a range of about 100 meters controlling communication between two cash machines
 - a second network connected to the internet, LAN, or WAN
 - wireless technology relying on infrared, Bluetooth, piconet or a frequency hopping, spread spectrum range of frequencies in the range of 2.4 to 2.56 GHz.
 - two cash devices operating in a master-slave mode.

In particular, the Appellants contend that the claim 15 phrases the Examiner indicated as unclear are not indefinite (Br. 13-17), that the three references applied against the claims are disparate and therefore would not have been combined (Br. 8-9), that Amos’s network would span a much larger range than the 100 meters in the claim (Br. 9-10), that the claim 15 subject matter calls for a more simple network than Amos (Br. 10), that only the inventors recognized the need for a local system handling plural cash machines wirelessly (Br. 11), and that the art fails to show the subject matter added by the dependent claims (Br. 11-13).

FACTS PERTINENT TO THE ISSUES

Based on a preponderance of the evidence, we make the following findings of fact:

The phrase “device for processing . . . including sorting” would convey to a person of ordinary skill in the art a device for processing wherein the processing includes the activity of sorting.

The phrase “totals . . . are brought together” would convey to a person of ordinary skill in the art that act of placing totals in proximity within memory.

Amos shows two automated tellers (ATM) connected by a network that may contain a wireless medium (satellite) in Fig. 2.

Each of Amos’ ATM’s in fig. 2 contains machines for accepting and distributing notes and coins and each ATM has a keyboard and display (col. 1 l. 66 – col. 2 l. 4 and col. 2, ll. 29-37).

Amos’ currency (cash) inserted or fed into the ATM becomes reusable in the device. The deposited amount is tallied and settled and then recycled into the cash inventory available to dispense. (col. 1, ll. 57-61).

Amos’ device consists of a cash note accepting/dispensing device, coin accepting/return device coupled to a display unit, data input devices and a printer /dispenser that utilizes a computer/microprocessor and a modem for control and communication to multiple such devices and/or a centralized database for transactions, accounting and inventory control (col. 2, ll. 29-37).

Amos uses the ATM’s by telephonic, *wireless*, or other type of network, available 24 hours a day, as sender, receiver and dispenser (A or B) of funds interchangeably (col. 2, ll. 37-41).

1 Therefore, each of Amos' ATM's has both a cash handling device for
2 processing notes and a cash handling device for processing coins.

3 For bills and coins that have been deposited to be recycled automatically, the
4 bills and coins must be separated by denomination, i.e., they must be sorted, so that
5 the device can determine the locations of various denominations for subsequent
6 distribution.

7 A person of ordinary skill in the art would understand Amos' accounting and
8 inventory control of notes and coins to inherently encompass tracking the
9 beginning inventories, receipts and distributions, and computing ending inventories
10 of notes and coins, because these are among the conventions of generally accepted
11 accounting principles.

12 These computations embrace totaling of notes and coins received. Similarly, a
13 person of ordinary skill in the art would understand that such totals would be
14 displayed for the purpose of auditing the recorded accounting results.

15 Amos' cash note accepting/dispensing device, by design of paper currency,
16 cannot accept coins. Similarly, Amos' coin accepting/dispensing device, by design
17 of metal coins, cannot accept paper currency.

18 Amos shows several embodiments that may be connected, beyond the ATM's,
19 including personal computers and financial service institutions (col. 2, ll. 16-27).
20 Such personal computers and financial service institutions would themselves
21 separately be in communication with other networks, such as the internet.

22 Amos relies on communication by any network or networking architecture
23 and/or protocols available to facilitate communications between multiple machines
24 (col. 3, ll. 20-29).

1 Watanabe shows an ATM also having both a bank note accepting and
2 dispensing device and a coin accepting and dispensing device, and explicitly
3 recites that it sorts the contents (col. 1, ll. 45-62).

4 Watanabe also shows a device to convey bank notes and coins to their
5 respective devices to ensure that coins cannot be received by the bank note
6 accepting and dispensing device and that bank notes cannot be received by the coin
7 accepting and dispensing device (col. 4, ll. 38-49).

8 Richardson shows that two different devices may communicate over short
9 ranges wirelessly (col. 2, ll. 3-13). This is a notoriously old and well known
10 means of communication between devices.

11 Richardson shows that the wireless communication may occur over infrared or
12 radio media (col. 2, ll. 3-13), the latter of which may rely on Bluetooth technology
13 in the 2.4 – 2.5 GHz portion of the radio frequency spectrum using hop frequencies
14 (col. 3, l. 58 – col. 4, l. 8).

15 Richardson shows that Bluetooth in particular may be set for 10-100 meters
16 distance apart use (col. 4, ll. 1-8).

17
18 ANALYSIS

19 *Claims 2-9 and 15-21 rejected under 35 U.S.C. § 112, second paragraph, as*
20 *rendering the claimed subject matter indefinite.*

21 The above facts show that the phrases “for processing notes including sorting,”
22 “for processing coins including sorting,” and “are brought together,” in claim 15
23 would be understood by a person of ordinary skill in the art and would therefore

1 not render claim 15 or the claims depending therefrom indefinite. Accordingly, we
2 do not sustain the Examiner's rejection of claims 2-9 and 15-21 under 35 U.S.C.

3 § 112, second paragraph, as rendering the claimed subject matter indefinite.
4

5 *Claims 2-9 and 15-21 rejected under 35 U.S.C. § 103(a) as obvious over Amos,*
6 *Watanabe, and Richardson.*

7 As regards independent claim 15, the above facts show that Amos describes a
8 cash management system; a first cash handling device for processing notes
9 including sorting of notes, totaling of notes received, and communicating note
10 totals to at least one of: a second cash handling device, a visual display and
11 communication through a network, wherein said first cash handling device does
12 not have the capability to receive or dispense coins (the note accepting/distributing
13 machine in one ATM); a second cash handling device for processing coins
14 including sorting of coins, totaling of coins received, and communicating coin
15 totals to at least one of: the first cash handling machine, a visual display and a
16 network, wherein said second cash handling device does not have the capability to
17 receive or dispense notes (the coin accepting/distributing machine in another
18 ATM); and wherein said first cash handling device and said second cash handling
19 device have respective circuits for communicating through a first wireless
20 communication network (satellite communication) wherein the first cash handling
21 device and the second cash handling device provide a cooperative cash
22 management system in which the totals for notes and coins, respectively, are
23 brought together through wireless communication from these respective devices
24 and are displayed on at least one of the first cash handling device, the second cash

1 handling device, or a third device operating as a visual display (the inventory and
2 accounting management features of Amos).

3 Although Amos does not show the network operating according to a network
4 standard for locally distributed wireless networks operating without servers, it does
5 show that any network system may be used. A network standard for locally
6 distributed wireless networks operating without servers is a species that would be
7 immediately envisaged within the taught genus of all network systems, because of
8 its simplicity.

9 Watanabe serves to provide further evidence that an ATM such as that in Amos
10 would sort its contents and safeguard physical entry of coins and notes to ensure
11 each went to the proper device.

12 Richardson shows that such a simple network, coupled with wireless
13 communication, was notoriously well known at the time of the invention and could
14 operate within a range of no more than 100 meters from one of the first the first
15 cash handling device and the second cash handling device. The actual limitation of
16 separation of less than 100 meters does not affect the operation of the invention,
17 but only serves to indicate the field in which the applicants envision practicing the
18 invention. Whether the Appellants were the first to recognize a market for placing
19 cash machines within such a range is moot because this range is a species of the
20 genus of all ranges that wireless communications encompass, and Richardson
21 suggests the advantages of such proximity in the choices of implementation modes
22 available at the claimed ranges. Accordingly, this limitation is accorded minimal
23 patentable weight, and is recognized as a limitation that the applied prior art must
24 be capable of practicing.

1 It would have been obvious to a person of ordinary skill in the art to have
2 applied Watanabe's ATM construction techniques to Amos because Watanabe
3 shows implementation details of ATM's such as Amos. It would have been
4 obvious to a person of ordinary skill in the art to have applied any of the wireless
5 communication techniques of Richardson to Amos because Richardson
6 demonstrates the notoriety of the wireless transmission taught by Amos, and also
7 teaches several implementation details for such wireless transmission. Therefore
8 we sustain the rejection of claim 15.

9 As regards claims 2 and 16, which add the limitation of a I/O device that
10 communicates through the wireless network, Amos' keyboards and displays are
11 such devices that operate through Amos' wireless network. Therefore we sustain
12 the rejection of claims 2 and 16.

13 As regards claims 3, 4, and 18, which add the limitation of connection to a
14 second network as well, Amos' alternate embodiments of personal computers and
15 financial service institutions would provide such connections. Therefore we sustain
16 the rejection of claims 3, 4, and 18.

17 As regards claims 5, 6, 7, 8, 9, 17, and 20, which add limitations of modes of
18 wireless transmission of infrared, radio waves and Bluetooth, relying on the 2.4 to
19 2.56 GHz spectrum, Richardson shows the notoriety of these modes, each of which
20 are art recognized equivalents to one another. Each of these modes has its own
21 strengths and weaknesses and would be selected according to routine optimization
22 within the specific context of Amos' machines' placement. Therefore we sustain
23 the rejection of claims 5, 6, 7, 8, 9, 17, and 20.

24 As regards claim 19, which adds the limitation of accepting unsorted batches of
25 notes and coins, Watanabe specifically sorts the notes and coins that are deposited.

1 A batch is a quantity considered as a group (*Merriam Webster*). Therefore
2 depositing a group of notes and coins, even one at a time, is a deposit of a batch.
3 Therefore we sustain the rejection of claim 19.

4 Claim 21 was excluded from the rejection in all of the prior actions that
5 rejected claims under this combination of art. This is the first instance of a
6 rejection of claim 21 under this applied art. The Examiner has not provided any
7 explanation as to how the art would read on claim 21. We can find no support in
8 any of the applied references for a master-slave relationship between two cash
9 machines connected by a wireless network.

10 Accordingly we sustain the Examiner's rejection of claims 2-9 and 15-20, but
11 do not sustain the rejection of claim 21, under 35 U.S.C. § 103(a) as obvious over
12 Amos, Watanabe and Richardson.

13
14 DECISION

15 To summarize, our decision is as follows:

- 16 • The rejection of claims 2-9 and 15-21 under 35 U.S.C. § 112, second
17 paragraph, as rendering the claimed subject matter indefinite is not
18 sustained.
- 19 • The rejection of claims 2-9 and 15-20 under 35 U.S.C. § 103(a) as obvious
20 over Amos, Watanabe, and Richardson is sustained.
- 21 • The rejection of claim 21 under 35 U.S.C. § 103(a) as obvious over Amos,
22 Watanabe, and Richardson is not sustained.

Appeal Number: 2006-2607

Application Number: 10/004,738

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2006).

AFFIRMED-IN-PART

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